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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,948	09/20/2005	Michael John Watchorn	TEBL4	6001

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EXAMINER

SINGH, SUNIL

ART UNIT	PAPER NUMBER
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3672

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/549,948	Applicant(s) WATCHORN, MICHAEL JOHN	
	Examiner Sunil Singh	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-19 and 21-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-19 and 21-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17-18,21-25, 27-28,33,34,35,36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faber (US 6745714) in view of Moody (US 5860379) and Ozaki et al. (US 6408780).

Faber discloses a deployable apparatus comprising: at least one a buoyant or semi-buoyant upper surface member having an upper surface (top members in Figure 1) and a lower surface and being disposed in use at or near the water surface; and an array of shaped drag inducing elements (bottom members depicted in Figs. 1,2) disposed adjacent the lower surface, a plurality of flexible fluid retaining structures (24,26,42,30, see Fig 1; col. 2 lines 35-55; col. 6 lines 1-5) to both maintain shape and correct operation of the upper surface member when in use, and to provide inflating medium to the array of shaped drag inducing elements. The apparatus has a length dimension and a width dimension, the length dimension being greater than the width dimension and the apparatus being configured so that, in use, the length dimension is generally parallel to the predominant wave direction. The upper surface member comprises a plurality of

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flexibly linked buoyant or semi-buoyant sections (see col. 2 lines 20-25). The flexible fluid retaining structures comprise a network grid of pipes or tubes. The fluid is maintained in the flexible structures under pressure (46, see col. 2 line 50+). At least one pump (46) for supplying fluid to said flexible fluid retaining structures. Leading inclined end (see Fig. 5). Faber discloses the invention substantially as claimed.

However, Faber is silent about the elements being collapsible or compressible. Further, Faber lacks a leading end that remains inclined downwardly when in use. Moody teaches elements being collapsible or compressible (6a,b,10a,b,12a,b see Figs. 1a,b,2). Ozaki et al. teaches a leading end that remains inclined downwardly when in use (see Fig. 3c). It would have been considered obvious to one of ordinary skill in the art to modify Faber by making his drag inducing elements collapsible or compressible as taught by Moody in order to enhance storage. Further, it would have been considered obvious to modify Faber to have the leading end remain inclined downwardly when in use as taught by Ozaki et al. since such a modification facilitates loading and unloading of the sea vessel and dissipate wave energy.

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3. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faber in view of Moody and Ozaki et al.

Faber (as modified above) discloses the invention except including a single sheet of flexible buoyant or semi-buoyant material. It would have been considered obvious to one of ordinary skill in the art to further modify the (above modified) Faber by substituting a single sheet of flexible buoyant or semi-buoyant material for the upper surface as disclosed by the (above modified) Faber since it has been held that forming in one piece an article which has formerly been formed in multiple pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

4. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faber in view of Moody and Ozaki et al. as applied to claim 17 above, and further in view of Hochschild, III (US 6592416).

Faber (as modified above) discloses the invention substantially as claimed. However, the (as modified above) Faber is silent about including a flexible drogue. Hochschild III teaches a flexible drogue(20). It would have been considered obvious to one of ordinary skill in the art to further modify the (above modified) Faber to include drogue as taught by Hochschild since such a modification improves stability.

It is well settled that changes in shape do not constitute a patentable difference. See *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966), wherein the court held that the configuration of the claimed disposable plastic nursing container was a matter of choice

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which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant.

5. Claims 31,32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manuel (US 3608316) in view of Faber and Moody and Ozaki et al.

Manuel discloses a system for deploying and recovering an apparatus comprising a deployment vessel, a storage device on the vessel for the apparatus and means for paying out and recovering the apparatus (see Fig. 8). Manuel discloses the invention substantially as claimed. However, Manuel is silent about deploying and recovering an apparatus as called for in claim 17. Faber (as modified) by Moody and Ozaki et al. teaches the apparatus as called for in claim 17 (see discussion above). It would have been considered obvious to one ordinary skill in the art to modify Manuel by substituting the apparatus as taught by Faber (as modified by Moody and Ozaki et al.) for the apparatus disclosed by Manuel since such a modification provides a boat lift away from shore.

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faber (US 6745714) in view of Moody (US 5860379) and Streichenberger (US 4872782).

Faber discloses a deployable apparatus: the apparatus having a length dimension and a width dimension, the length dimension being greater than the width dimension and the apparatus being configured so that, in use, the length dimension is generally parallel to

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the predominant wave direction, the apparatus comprising: at least one a buoyant or semi-buoyant upper surface member having an upper surface (top members in Figure 1) and a lower surface and being disposed in use at or near the water surface; and an array of shaped drag inducing elements (bottom members depicted in Figs. 1,2) disposed adjacent the lower surface. The upper surface member comprises a plurality of flexibly linked buoyant or semi-buoyant sections (see col. 2 lines 20-25). A plurality of flexible fluid retaining structures disposed thereon (24,26,42,30, see Fig 1; col. 2 lines 35-55; col. 6 lines 1-5), wherein inflating fluid for the inflatable drag inducing elements is supplied from the flexible fluid retaining structures. The plurality of flexible fluid retaining structures maintain (24,26,42,30, see Fig 1; col. 2 lines 35-55; col. 6 lines 1-5) shape and correct operation of the upper surface member when in use. The flexible fluid retaining structures comprise a network grid of pipes or tubes. The fluid is maintained in the flexible structures under pressure (46,see col. 2 line 50+). At least one pump (46) for supplying fluid to said flexible fluid retaining structures. Leading inclined end (see Fig. 5). Faber discloses the invention substantially as claimed. However, Faber is silent about the elements being collapsible or compressible. Further, Faber lack bristles or fronds as drag inducing elements. Moody teaches elements being collapsible or compressible (6a,b,10a,b,12a,b see Figs. 1a,b,2). Streichenberger teaches bristles or fronds as drag inducing elements (see Figs. 1,8). It would have been considered obvious to one of ordinary skill in the art to modify Faber by making his drag inducing elements collapsible or compressible as taught by Moody in order to enhance storage. Further, it would have been considered obvious to one of ordinary skill in the art to

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modify Faber to include the bristles/fronds as taught by Streichenberger in order to absorb wave energy.

7. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faber in view of Moody and Streichenberger as applied to claim 29 above, and further in view of Ozaki et al.

Faber (as modified above) discloses the invention substantially as claimed. However, Faber lacks a leading end that remains inclined downwardly when in use. Ozaki et al. teaches a leading end that remains inclined downwardly when in use (see Fig. 3c). It would have been considered obvious to one of ordinary skill in the art to further modify the (above modified) Faber to have the leading end remain inclined downwardly when in use as taught by Ozaki et al. since such a modification facilitates loading and unloading of the sea vessel and dissipate wave energy.

Response to Arguments

8. Applicant's arguments filed 4/9/10 have been fully considered but they are not persuasive. Applicant argues that Faber fails to teach flexible fluid retaining structures to maintain shape and correct operation of the upper surface member when in use and to provide inflating medium to the array of shaped drag inducing elements. The examiner disagrees. Faber teaches a plurality of flexible fluid retaining structures disposed thereon (24,26,42,30, see Fig 1; col. 2 lines 35-55; col. 6 lines 1-5), wherein inflating fluid for the drag inducing elements is supplied from the flexible fluid retaining

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structures. The plurality of flexible fluid retaining structures maintain (24,26,42,30, see Fig 1; col. 2 lines 35-55; col. 6 lines 1-5) shape and correct operation of the upper surface member when in use.

Applicant argues that the prior art fail to teach the "provision of maintaining the structural rigidity by providing a grid network of pipes containing fluid under pressure". It should be noted that such argument is far more limiting than the claimed subject matter. There is no "provision of maintaining the structural rigidity" recited in any of the claims. Applicant argues that Faber fails to teach an apparatus for creating a local reduction in wave height. It should be noted that Faber as modified by Moody and Ozaki et al. have all the structural limitations as called for in claim 17; therefore, if the apparatus called for in claim 17 can create a local reduction in wave height, then so can the apparatus as disclosed by Faber in view of Moody and Ozaki et al.

Applicant argues that Faber does not have the mechanical strength to be used to reduce waves for example in an offshore environment where the wind and wave forces are of orders of magnitude greater than in a quiet harbor. Such argument is mere speculation and conjecture unsubstantiated with any facts and finding. Furthermore, such argument is far more limiting than the claimed subject matter. There is no claim limitation requiring the "wind and wave forces are of orders of magnitude greater than in a quiet harbor".

Applicant argues that Faber fails to teach a leading end remaining inclined downwardly with respect to incident waves when in use. It should be noted that the examiner relied on Ozaki et al. for such teaching and not Faber.

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Applicant argues that Faber fails to teach drag inducing elements comprising bristles and fronds. It should be noted that the examiner relied on Streichenberger for such teaching and not Faber.

Applicant argues that Faber fails to teach a drag inducing element that has the shape of a prism. The examiner disagrees. Prism is a block of clear glass or plastic which separates the light passing through it into different colors. Therefore, Faber teaches a drag inducing element having the shape of a “block” which meets the limitation of “shape of a prism”.

Applicant argues that Moody does not teach an apparatus for creating a local reduction in wave height. It should be noted that Faber as modified by Moody and Ozaki et al. have all the structural limitations as called for in claim 17; therefore, if the apparatus called for in claim 17 can create a local reduction in wave height, then so can the apparatus as disclosed by Faber in view of Moody and Ozaki et al.

Applicant argues that there is no motivation to add the collapsible boat lift of Moody to the existing boat lift of Faber. The examiner disagrees. It would have been considered obvious to one of ordinary skill in the art to modify Faber by making his drag inducing elements collapsible or compressible as taught by Moody in order to enhance storage. The modification of Faber in view of Moody allows the drag inducing elements of Faber to be collapsible or compressible in order to facilitate storage.

Applicant argues that modifying Faber to have his drag inducing elements collapsible or compressible as taught by Moody would not be obvious since no other elements of Faber is collapsible. The examiner disagrees with such argument.

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It would have been considered obvious to one of ordinary skill in the art to modify Faber by making his drag inducing elements collapsible or compressible as taught by Moody in order to enhance storage.

Applicant argues that Faber teaches away from having collapsible or compressible drag inducing elements. The examiner disagrees. Such assertion is mere speculation and conjecture unsubstantiated with any facts or findings.

Applicant argues that modifying Faber to have collapsible or compressible drag inducing elements would destroy Faber. Such assertion is mere speculation and conjecture unsubstantiated with any facts or findings.

Applicant argues there is no motivation to modify Faber in view of Moody and Ozaki et al. and further in view of Hochschild II to include a drogue anchor since this plays no part in reducing wave height. It should be noted that the modification was done to provide stability and not to reduce wave height.

In response to applicant's argument that none of the prior art either alone or in combination teach an apparatus to reduce wave height, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). The rejections presented above are directed to modification of a floating dock. And as such the above combinations are considered obvious. However, it should be noted that the above rejections have all the structural limitations as called for in claims; therefore, if the apparatus called for in claims can create a local reduction in wave

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height, then so can the apparatus as disclosed by combined references discussed above.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/
Primary Examiner, Art Unit 3672

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Primary Examiner
Art Unit 3672

SS

6/28/10